

Solid / Hollow Plug

GENERAL

The solid / hollow plug is a key component to the Caproco high pressure access fitting assembly, as the plug body provides the seal in the access fitting, thereby maintaining line pressure. The plug also serves an important function of holding the monitoring equipment which is exposed to the system, and is the component to which the Caproco Retriever attaches in order to access and service the monitoring equipment.

There are two types of plug assemblies which can be used in any of the Caproco high pressure access fittings:

Solid Plug - used in conjunction with:

- Corrosion coupon holders
- Injection/Sampling equipment
- Bacterial sampling probes
- · Sand probes

Hollow Plug - used in conjunction with:

- Electrical Resistance probes
- Linear Polarization probes
- Galvanic and Hydrogen probes

When combined with the Caproco access fitting, the Caproco plug facilitates accessing the operating system under full operating conditions (up to 6,000 psi / 41.4 Mpa), thereby eliminating the need to shut down in order to obtain vital corrosion data.

HOLLOW PLUG ASSEMBLY

The standard Hollow Plug Assembly consists of:

- Hollow Plug Body
- Primary Packing
- Hollow Plug Packing Retaining Nut
- Probe Packing
- · Hollow Plug Seal Nut
- Pipe Plug

The hollow plug packing retaining nut holds the primary packing in position to allow for a primary seal between the hollow plug and the access fitting body.

The hollow plug seal nut holds the probe packing in position to allow for a primary seal between the hollow plug and hollow plug seal nut.

The threads on the hollow plug which mate with the access fitting body are right-handed, while its base uses left-handed threads. This arrangement of right and left-handed threads ensures that the functional parts of the monitoring device cannot become unscrewed during the extraction process.

The internal bore of the access fitting narrows so that should the monitoring device or the plug retaining nut attached to the plug come loose, it cannot fall through the access fitting body into the line (but will come to rest at a narrowing just below the packing seat). It may then be retrieved using a fishing tool designed for this purpose.



Hollow Plug

The following options are available for the hollow plug assembly:

- 1) Metallurgy changes to ferrous and non-ferrous alloys for special service
- 2) Packing material changes for special service

Hollow Plug Assembly Parts List

DESCRIPTION	PART Number	MATERIAL	WEIGHT
Hollow Plug Assembly	10591		1 lb 12 oz. (794 g)
Hollow Plug Body	10592	316 SS	1 lb 4 oz. (567 g)
Hollow Plug Retaining Nut	10593	316 SS	2.7 oz. (76 g)
Hollow Plug Bore Sealing Nut	10594	316 SS	4.5 oz. (127 g)
Set Screw (2 required)	10589	316 SS	0.1 oz. (2 g)
Primary Packing	10587	25% Glass Filled Teflon	0.3 oz. (8 g)
Probe Packing	10596	25% Glass Filled Teflon	0.2 oz. (5 g)
Pipe Plug (½"NPT)	10597	Plastic	0.1 oz. (2 g)

SOLID PLUG ASSEMBLY

The standard Solid Plug assembly consists of:

- Solid Plug Body
- O-ring
- Probe Packing
- Packing Retaining Nut
- Pipe Plug

The packing retaining nut keeps the primary packing in position and ensures that a sound seal is achieved when a corrosion monitoring device is not attached to the solid plug.

The O-ring provides a secondary seal and protects the bore threads from unnecessary exposure to the system's fluid.

Like the Caproco hollow plug, the threads on the solid plug which mate with the access fitting body are right-handed, while the threads at its base are left-handed. This arrangement of right and left-handed threads has a tendency to screw the monitoring device or retaining nut to the solid plug during the extraction process, which ensures that the functional parts of the monitoring device are not lost during this operation.

The following options are available for the solid plug assembly:

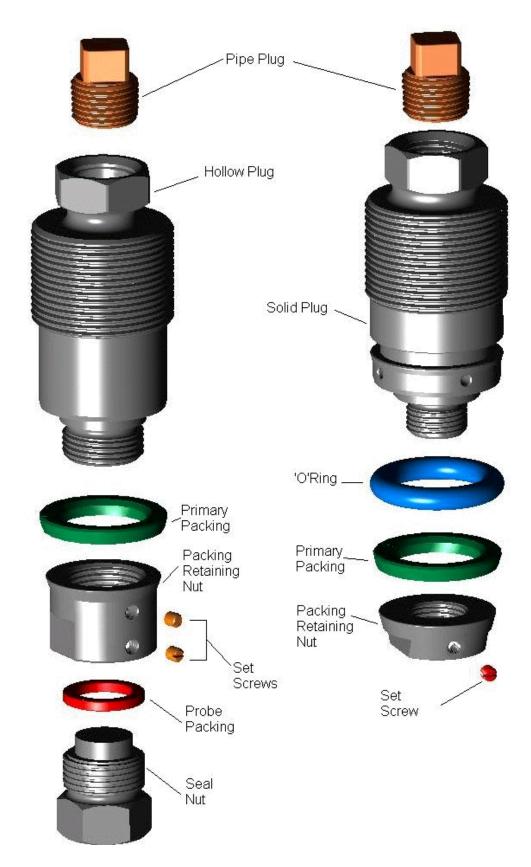
- 1) Metallurgy changes to ferrous and non-ferrous alloys for special service
- 2) O-ring material changes for special service
- 3) Packing material changes for special service

Solid Plug Assembly Parts List

DESCRIPTION	PART NUMBER	MATERIAL	WEIGHT
Solid Plug Assembly	10584		1 lb 12 oz. (794 g)
Solid Plug Body	10585	316 SS	1 lb 8 oz. (680 g)
Solid Plug Packing Retaining Nut	10586	316 SS	2 oz. (56 g)
Set Screw	10589	316 SS	0.05 oz. (1 g)
Solid Plug O-Ring	10588	Viton	0.1 oz. (2 g)
Primary Packing	10587	25% Glass Filled Teflon	0.3 oz. (8 g)
Pipe Plug (½"NPT)	10590	316 SS	1.7 oz. (48 g)



Solid Plug



HOLLOW AND SOLID PLUG - EXPLODED VIEW